

I Claim:

1. A diaphragm valve, moveable between a fully open position and a fully closed position, the valve comprising:
 - a) a bonnet having an abutment surface;
 - 5 b) a stem moveable relative to the bonnet, the stem having at least one aperture;
 - c) a handle being freely rotatable on the stem and freely axially slidable on the stem, the handle having a stop with a surface for contacting the abutment surface of the bonnet; and
 - 10 d) a pin extending through the handle and into the at least one aperture in the stem for fixing the position of the handle relative to the stem.
2. A diaphragm valve according to claim 1, wherein the at least one aperture comprises a slot that extends radially into the stem and axially
15 along the stem and has a circumferential width adapted to receive the pin.
3. A diaphragm valve according to claim 2, wherein the slot has a first end and a second end and the pin is moveable between a first position adjacent the first end and a second position adjacent the second end.
4. A diaphragm valve according to claim 3, wherein when the pin is
20 in the first position and the valve is in the fully open position the distance between the surface of the stop of the handle and the abutment surface of the bonnet is substantially equal to the stroke of the valve.
5. A diaphragm valve according to claim 3, wherein when the pin is in the second position and the valve is in the fully opened position the surface
25 of the stop of the handle contacts the abutment surface of the bonnet.
6. A diaphragm valve according to claim 3, wherein when the pin is in the first position and the valve is in the fully closed position the surface of the stop of the handle contacts the abutment surface of the bonnet.

7. A diaphragm valve according to claim 1, wherein the bonnet defines an opening of a size and configuration to receive therethrough the stem.

8. A diaphragm valve according to claim 1, wherein the bonnet has
5 a first thread and the stem has a second thread that cooperates with the first thread to allow the stem to be axially moveable relative to the bonnet.

9. A diaphragm valve according to claim 1, wherein the at least one aperture comprises a first aperture and a second aperture and the pin is moveable between a first position in the first aperture and a second position in
10 the second aperture.

10. A diaphragm valve according to claim 9, wherein when the pin is in the first position and the valve is in the fully opened position the distance between the surface of the stop of the handle and the abutment surface of the bonnet is substantially equal to the stroke of the valve.

15 11. A diaphragm valve according to claim 9, wherein when the pin is in the second position and the valve is in the fully opened position the surface of the stop of the handle contacts the abutment surface of the bonnet.

12. A diaphragm valve according to claim 9, wherein when the pin is in the first position and the valve is in the fully closed position the surface of
20 the stop of the handle contacts the abutment surface of the bonnet.

13. A diaphragm valve according to claim 9, further comprising at least one additional aperture positioned between the first aperture and the second aperture.